

ABSTRACT OF THE DISCLOSURE

An object of the present invention is to provide an electron beam lithography system and an electron beam lithography method that reduce drawing discrepancy caused by thermal expansion of a target wafer, and that thereby easily achieve drawing with a high degree of accuracy.

There is provided an electron beam lithography system that draws circuit patterns on a target wafer by use of an electron beam, said electron beam lithography system including an electro-optic system and a target chamber.

A computer used for calculating thermal deformation is provided outside a control computer. When the application of the electron beam increases a temperature of the target wafer, the amount of discrepancy caused by thermal deformation is calculated from a dose of the electron beam.

Then, by handling the amount of discrepancy as compensation data used for a drawing program to be supplied to an electron beam deflector, the effect of the thermal deformation is compensated.